

Title (en)
FUEL CELL SYSTEM AND START METHOD THEREOF

Title (de)
BRENNSTOFFZELLENSYSTEM UND STARTVERFAHREN DAFÜR

Title (fr)
SYSTEME DE PILE A COMBUSTIBLE ET SON PROCEDE DE DEMARRAGE

Publication
EP 1845574 A4 20090527 (EN)

Application
EP 06712082 A 20060120

Priority
• JP 2006300857 W 20060120
• JP 2005015187 A 20050124

Abstract (en)
[origin: EP1845574A1] There are provided a fuel cell system 10 and a starting method therefor, capable of setting a start-up mode which is appropriate to energy stored in a secondary battery 108, eliminating a trouble in starting the fuel cell system. The fuel cell system 10 includes: a fuel cell 12; a secondary battery 108 which is electrically connected with the fuel cell 12; a secondary-battery charge-amount detection unit 112 which detects an amount of charge in the secondary battery 108; and memory means which stores at least one threshold value for determining the start-up mode of the fuel cell system 10. Stored electric energy which corresponds to the amount of charge in the secondary battery 108 is calculated, and a start-up mode of the fuel cell system 10 is determined based on the electric energy stored in the secondary battery 108 and the threshold value stored in the memory means.

IPC 8 full level
H01M 8/00 (2006.01); **H01M 8/04** (2006.01); **H01M 8/10** (2006.01); **H01M 10/48** (2006.01)

CPC (source: EP US)
H01M 8/04089 (2013.01 - EP US); **H01M 8/04186** (2013.01 - EP US); **H01M 8/04194** (2013.01 - EP US); **H01M 8/04225** (2016.02 - EP US); **H01M 8/04302** (2016.02 - EP US); **H01M 8/04313** (2013.01 - EP US); **H01M 8/0432** (2013.01 - EP US); **H01M 8/04328** (2013.01 - EP US); **H01M 8/04365** (2013.01 - EP US); **H01M 8/04447** (2013.01 - EP US); **H01M 8/04559** (2013.01 - EP US); **H01M 8/04589** (2013.01 - EP US); **H01M 8/04708** (2013.01 - EP US); **H01M 8/04716** (2013.01 - EP US); **H01M 8/04753** (2013.01 - EP US); **H01M 8/0488** (2013.01 - EP US); **H01M 8/0494** (2013.01 - EP US); **H01M 8/04947** (2013.01 - EP US); **H01M 10/48** (2013.01 - EP US); **H01M 16/006** (2013.01 - EP US); **B60L 58/31** (2019.01 - EP US); **H01M 8/04164** (2013.01 - EP US); **H01M 8/04216** (2013.01 - EP US); **H01M 8/0662** (2013.01 - EP US); **H01M 8/1011** (2013.01 - EP US); **H01M 2250/20** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP US); **Y02T 90/40** (2013.01 - EP US)

Citation (search report)
• [X] US 5820172 A 19981013 - BRIGHAM DAVID RICHENS [US], et al
• [X] WO 2004042854 A2 20040521 - NISSAN MOTOR [JP], et al
• [X] US 2003180583 A1 20030925 - ICHIKAWA HIROYUKI [JP], et al
• [A] US 5964309 A 19991012 - KIMURA YOSHIO [JP], et al
• See references of WO 2006077970A1

Cited by
CN104022545A; EP4144570A4; DE112008002999B4; DE112008002999B8; US8420269B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1845574 A1 20071017; **EP 1845574 A4 20090527**; **EP 1845574 B1 20150708**; JP 5191129 B2 20130424; JP WO2006077970 A1 20080619; TW 200640062 A 20061116; TW I371132 B 20120821; US 2009130497 A1 20090521; US 8206858 B2 20120626; WO 2006077970 A1 20060727

DOCDB simple family (application)
EP 06712082 A 20060120; JP 2006300857 W 20060120; JP 2006553969 A 20060120; TW 95102606 A 20060124; US 81463006 A 20060120